BULLETIN OF THE

PENNSYLVANIA

Department of Agriculture

HARRISBURG, PA.

Vol. 3 APRIL, 1920 No. 7

GENERAL BULLETIN NO. 338

Registered Brands

OF

FERTILIZERS and LIME

LICENSED FOR 1920 PRIOR TO MARCH 1ST.

JAMES W. KELLOGG, Chief Chemist

BUREAU OF CHEMISTRY

Published Monthly by Direction of

FRED. RASMUSSEN, Secretary of Agriculture, Harrisburg, Pa.

Entered as Second Class Matter, March 22, 1918, at the Post Office at Harrisburg, Pa., under the Act of June 6, 1900. Acceptance for mailing at special rate of Postage provided for in Section 1103, Act of October 3, 1917, authorized on June 29, 1918.

HARRISBURG, PENNA.
J. L. L. KUHN, PRINTER TO THE COMMONWEALTH
1920

VIRTUS
LABORE
ORNAT

SPECIAL NOTICE.

The attention of local dealers and manufacturers' agents selling commercial fertilizers and lime products for agricultural purposes is called to the list published herewith, of manufacturers, producers and importers, together with a list of the several brands of commercial fertilizers, chemicals and lime products they have registered for sale in this State during the year 1920.

Local dealers and agents should see that all commercial fertilizers and lime products used for agricultural purposes sold, offered, or exposed for sale by them are registered and all other requirements of the laws regulating the sale of the same are complied with for the reason that if they are sold, offered or exposed for sale in violation of these laws, they are, together with the manufacturer, liable to the penalty prescribed therein, governing the manufacture and sale of such commodities in Pennsylvania.

In the event of any claim being made by a manufacturer, importer or producer that certain brands of their products are registered and the names of such products are not contained in this list, it is the duty of agents and dealers to write to the Department and ascertain if such products have been registered subsequently to the publication of this bulletin.

This is one of the means by which such agents and dealers can protect themselves from personal liability to these Acts of Assembly.

FRED. RASMUSSEN,

Secretary of Agriculture.

Harrisburg, Pa., March 1, 1920.

PENNSYLVANIA FERTILIZER LAW

As Amended May 29, 1917.

REQUIRED BRANDING.

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1. Net weight of package.
2. Brand or trade-name.
3. Name and address of Manufacturer, Importer, person or firm responsible for sale of such fertilizers.
4. Guaranteed analysis:
   - (a) Nitrogen.
   - (b) Nitrogen equivalent to ammonia.
   - (c) Total phosphoric acid.
   - (d) Available phosphoric acid.
   - (e) Potash, soluble in distilled water.
   - (f) Minimum percentages only to be stated.
   - (g) In case of undissolved bone, tankage, phosphate rock and similar materials when sold separately or unmixed the total phosphoric acid only can be shown.
   - (h) The available phosphoric acid by Wagner method can be shown in connection with basic slag.

SCHEDULE OF FEES.

New brands, each,	$15 00
0 to 150 tons, each,	15 00
Over 150 tons to 250 tons, each,	20 00
Over 250 tons to 400 tons, each,	30 00
Over 400 tons to 500 tons, each,	40 00
Over 500 tons, each,	50 00

Checks should be drawn to order of Secretary of Agriculture or State Treasurer, certified and sent with application to Bureau of Chemistry.

Registration expires December 31st of each year.

Section 1. Be it enacted, &c., That all corporations, associations, partnerships, or persons, before selling or offering for sale any commercial fertilizer in the Commonwealth, except the dung of domestic animals, lime, marl, and wood ashes, shall brand or attach to each bag, barrel, or package in a conspicuous place on the outside thereof,

a plainly printed statement giving the following particulars and no others:—

(1) The number of pounds of fertilizer contained in the package.

(2) The name, brand, or trade-mark under which the fertilizer is sold.

(3) The name and principal address of the manufacturer, importer, or other person putting the fertilizer on the market in this Commonwealth.

(4) The minimum percentage of each of the following constitutnts which the fertilizer may contain; (a) nitrogen; (b) nitrogen equivalent to ammonia; (c) total phosphoric acid; (d) available phosphoric acid; (e) potash soluble in distilled water. The potash may be claimed "derived from," or "equivalent to," sulphate of potash, if there is not sufficient amount of chlorine present to unit with one-half ($\frac{1}{2}$) of one per centum (1%) of actual potash (K_2O). In the case of undissolved bone, tankage, phosphate rock, and similar materials in their natural and untreated conditions, when sold unmixed with other substances, the minimum percentage of the total phosphoric acid therein may be stated, instead of the percentage of total and available phosphoric acid. But, in the case of basic phosphatic slag, the available phosphoric acid shall be stated on the basis of the results of an analysis by the Wagner method, so-called, until such time as the Association of Official Agricultural Chemists of North America shall adopt an official method of analysis for basic slag, after which the available phosphoric acid shall be stated on the basis of an analysis by the method of said association.

Section 2. Every manufacturer or importer of commercial fertilizers, as specified in section one of this act, shall, on or before the first day of January of each year, or before offering them for sale in this Commonwealth, file annually with the Secretary of Agriculture a statement of the names and number of brands of such commercial fertilizers, having distinct trade-names, that he shall offer for sale during the next ensuing year, and a copy of the analysis of each one of such brands of commercial fertilizers, as required by section one of this act.

Section 3. In addition to the statement required by section two of this act, every manufacturer or importer of commercial fertilizers shall, on or before the first day of January of each year, or before offering them for sale in this Commonwealth, file annually with the Secretary of Agriculture an affidavit showing the amount of each brand of fertilizer, having a distinct trade-name, sold within the Commonwealth during the last preceding year; and if the said amount shall be one hundred and fifty tons or less, he or they shall pay or cause to be paid to the Secretary of Agriculture the sum of fifteen dollars for each and every brand of such commercial fertilizer, having a

distinct trade-name, sold within the State during the last preceding year; and if the said amount shall exceed one hundred and fifty tons, and be not more than two hundred and fifty tons, he or they shall pay the sum of twenty dollars, as aforesaid; if the said amount shall exceed two hundred and fifty tons, and not more than four hundred tons, he or they shall pay the sum of thirty dollars; if the amount shall exceed four hundred tons, and not more than five hundred tons, he or they shall pay forty dollars; and if the amount shall exceed five hundred tons, he or they shall pay fifty dollars. If such manufacturer or manufacturers, importer or importers, shall not have made any sales within the Commonwealth during the preceding year, he or they shall pay the sum of fifteen dollars upon each such brand, as aforesaid: Provided, That all moneys so received shall be immediately paid by the Secretary of Agriculture into the State Treasury for the use of the Commonwealth.

Section 4. No person shall sell, offer, or expose for sale, in this State, any pulverized leather, hair, ground hoofs, horns, or wool waste, raw, steam, roasted, or in any form, as a fertilizer, or as an ingredient of a fertilizer or manure, without an explicit statement of the fact; said statement to be conspicuously affixed to every package of such fertilizer or manure, and to accompany and go with every lot, parcel, or package of the same.

Section 5. Any person or persons selling, offering or exposing for sale, any commercial fertilizer or any brand of the same, having a distinct trade-name without the analysis required by section one of this act or with an analysis stating that it contains a larger percentage of any one or more of the above-named constituents than is contained therein, or for the sale of which all the provisions of sections two and three have not been complied with, or any person, violating any of the provisions of section four of this act, shall be guilty of a misdemeanor, and, on conviction, shall be sentenced to pay a fine of not less than twenty-five nor more than one hundred dollars for the first offense, and not less than two hundred dollars for each subsequent offense. It shall be the duty of the Secretary of Agriculture to enforce the provisions of this act, and all penalties, costs, and fines recovered shall be paid to him or his duly authorized agent, and by him shall be immediately paid into the State Treasury, for the use of the Commonwealth.

Section 6. The Secretary of Agriculture is hereby empowered to collect samples of commercial fertilizers, either in person or by his duly qualified agent or representative, and to have them analyzed, and to publish the results for the information of the public; and for this purpose the said Secretary of Agriculture, such assistants, agents, experts, chemists, detectives, and counsel as he shall duly au-

thorize, shall have full access, ingress, and egress to and from all places of business, factories, barns, buildings, carriages, cars, and vessels, used in the manufacture and transportation, or sale, of any commercial fertilizer. They shall also have power to open any package or vessel containing or supposed to contain any commercial fertilizer, and take therefrom samples for analysis, upon tendering the value of said samples.

Section 7. The term "commercial fertilizers," as used in this act, shall be construed to mean any and every substance imported, manufactured, prepared, or sold for fertilizing or manuring purposes, except the dung of domestic animals, marl, lime, and wood-ashes, and not exempt by the provisions of section one of this act.

BONE LAW.

Section 1. Be it enacted, &c., That it shall be unlawful for any person, firm, or corporation, engaged in the manufacture or sale of commercial fertilizers, to use the word "bone" in connection with, or as part of the name of, any fertilizer, or any brand of the same, unless the phosphoric acid contained in such fertilizer shall be the product of pure animal bone.

Section 2. Any person or persons violating the provisions of this act shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall pay a fine of fifty dollars for the first offense, and a fine of not less than one hundred dollars, nor more than two hundred dollars, for every subsequent offense; such fine or fines to be paid into the State Treasury, for the use of the Commonwealth. The Secretary of Agriculture shall, together with his deputies, agents, and assistants, be charged with the enforcement of this act.

Section 3. All magistrates, aldermen, and justices of the peace throughout this Commonwealth shall have jurisdiction to hear and determine actions arising from violations of the provisions of this act, and shall have authority to hold for court, or to impose the penalties hereby prescribed, subject to appeal, as the law shall direct.

Section 4. This act shall go into effect on the first day of January, Anno Domini nineteen hundred and ten.

PENNSYLVANIA LIME LAW.
REQUIRED BRANDING.

1. Net weight of package.
2. Brand or trade-name.
3. Name and address of Manufacturer, Importer, person or firm responsible for sale of Lime Products.

4. Guaranteed analysis:

For Pulverized Limestone, Ground Oyster Shells and Artificial Carbonates of Lime:

(a) Calcium Oxide.
(b) Calcium Carbonate.
(c) Magnesium Oxide.
(d) Magnesium Carbonate.
(e) Degree of fineness or Sieve Mesh.

For Burnt Lime, Hydrated Lime, Slaked Lime, Spraying Lime and Marl:

(a) Calcium Oxide.
(b) Magnesium Oxide.

For Gypsum or Land Plaster::

(a) Calcium Oxide.
(b) Sulphur Trioxide.

5. Minimum percentage guarantees only permitted.

SCHEDULE OF FEES.

New Brands, each,	$5 00
0 to 1000 tons, each,	5 00
1000 tons to 5000 tons, each,	10 00
Over 5000 tons, each,	20 00

Checks should be drawn to order of Secretary of Agriculture or State Treasurer, certified and sent with application to Bureau of Chemistry.

Registration expires December 31st of each year.

Section 1. Be it enacted, &c., That every bag, barrel, or other package or quantity, of any pulverized limestone, ground oyster shells, artificial carbonate of lime, ground lime, spraying lime, slaked-lime, hydrated lime, hydrated spraying lime, marl, gypsum, or land-plaster, sold, offered, or exposed for sale, within this Commonwealth for use as a soil amendment or as an ingredient or reagent in the preparation of any fungicide or insecticide, shall have attached to it or be accompanied, in the manner provided in section three hereof, by a plainly printed statement giving the name and address of the manufacturer or importer and his place of business, the brand or tradename of said material, the net weight of the contents of the package,

when sold in package, and a statement declaring, with respect to pulverized limestone, ground oyster shells, and artificial carbonate of lime: (a) The degree of fineness of the material, in terms of the minimum sieve-mesh, expressed in fractions of an inch, through which the coarsest particles of said material can pass; and (b) the minimum percentages contained of available oxides of calcium and magnesium, respectively, combined as carbonates; with respect to lime, ground lime, spraying lime, slaked-lime, hydrated lime, hydrated spraying lime, and marl, the minimum percentages contained of the available oxides of calcium and magnesium, respectively; and with respect to gypsum, or land-plaster, the minimum percentages contained of available calcium oxide and sulphur trioxide, or sulphuric acid (SO^3) respectively; which statement shall be held to be the guaranty of the manufacturer or importer that the goods to which said statement refers are of the kind and quality, or composition and fineness, so set forth. The provisions of this act shall not, however, apply to air-slaked lime, kiln-slakes, gas-house lime, or tanners' lime, when sold as such.

Section 2. For the purpose of this act, the materials named in the foregoing section are defined as follows:

(1) Limestone is the rock commonly known by that name, and consisting chiefly of calcium carbonate, or of said carbonate with a small molecular proportion of magnesium carbonate.

(2) Pulverized limestone is limestone reduced by mechanical means to a fine powder.

(3) Artificial carbonate of lime is carbonate of lime artificially produced by any method other than the exposure of lime, ground lime, slaked-lime, hydrated lime, or spraying lime to the action of the atmosphere.

(4) Lime is the product obtained by the complete burning of limestone in a kiln, and capable of being reduced by slaking to a fine powder.

(5) Ground lime is lime reduced to a fine powder by grinding.

(6) Spraying lime is lime of high purity, containing not less than ninety-three per centum of calcium oxide and not more than five per centum of magnesium oxide, not more than five per centum of carbon dioxide, nor more than five per centum of acid insoluble matters, iron or aluminum oxides, collectively.

(7) Slaked-lime is the dry finely divided product obtained by the addition of water to lime.

(8) Hydrated lime is slaked-lime prepared by the aid of stirring, or of stirring, grinding, and screening machinery, and is free from hard lumps.

(9) Hydrated spraying lime is dry finely divided hydrated lime of purity not less, after taking the water of hydration into account, than that herein required in the case of spraying lime, and of such fineness that all shall pass a standard sieve of one hundred meshes to the inch.

(10) Air-slaked lime is the more or less finely divided product obtained when lime, slaked-lime, hydrated lime, or spraying lime is exposed for a considerable time to the action of the air.

(11) Marl is clay highly charged with carbonate of lime. Shell marl is marl in which the carbonate of lime is present chiefly in the form of molluscan shells.

(12) Gypsum, or land-plaster, is the finely divided mineral, commonly known by that name, and consisting chiefly of calcium sulphate.

(13) Kiln-slakes is refuse lime mixed with ashes and "core," or imperfectly burned limestone.

(14) Gas-house lime is spent lime that has been used as a purifier in the manufacture of illuminating gas.

(15) Tanner's lime is spent lime that has been used in the curing of hides.

Section 3. The statement required by section one of this act shall, in the case of goods sold in package, be plainly printed upon the package, or upon a tag or label fastened thereto, of such quality and in such manner that it shall not be detached in handling, and, in the case of goods sold in bulk, the said statement shall be delivered to the purchaser either with the invoice therefor or with the goods.

Section 4. Every manufacturer or importer of one or more of the materials named in section one of this act, for either or both of the purposes therein stated, shall, on or before the first day of January of each year, or before offering them for sale in this Commonwealth for either of said purposes, file annually with the Secretary of Agriculture a statement of the names and number of brands of such materials having distinct trade-names that he shall offer for sale, for either or both of said purposes, during the next ensuing calendar year or remainder thereof, together with a copy of the statement declaring the composition of these several brands of said materials, as required by section one of this act.

Section 5. In addition to the statement required by section four of this act, every manufacturer or importer of any of the materials named in section one of this act shall on or before the first day of January of each year, or before offering them for sale within this Commonwealth, file annually with the Secretary of Agriculture an affidavit showing, as nearly as practicable, the weight of each brand of said materials sold by him, or, if the producer or vendor be a

firm or corporation, by its managers, officers and agents, within the Commonwealth, for either or both of the purposes named in section one of this act, during the last preceding year; and for each brand so sold he shall pay to the Secretary of Agriculture a license fee, according to the weight sold, as follows: For an amount exceeding one hundred tons, but not exceeding one thousand tons, five dollars; for an amount exceeding one thousand tons, but not exceeding five thousand tons, ten dollars; and for an amount exceeding five thousand tons, twenty dollars; and when said fees shall have been paid, and the statements required by section four of this act have been filed with the Secretary of Agriculture, the party or parties who have made such payment, and otherwise complied with the provisions of this act, shall be entitled to sell within the Commonwealth the goods specified in said statement and covered by said fees during the year, or fraction of a year, immediately following said statement. If the manufacturer or importer shall not have made during the preceding year any sales within the Commonwealth, for the aforesaid purposes, of any brand to be offered for sale during the year for which the fee is to be paid, he shall pay for each such brand a fee of five dollars. All moneys so received shall be immediately paid by the Secretary of Agriculture into the State Treasury, for the use of the Commonwealth.

Section 6. Any person or persons selling, offering, or exposing for sale, for either of the purposes stated in section one of this act, any of the materials named therein or brand of the same, unless accompanied by the statement required by section one of this act, or, when so accompanied, if the said statements shall be false in any particular, or without having complied with all the foregoing provisions of this act, shall be guilty of a misdemeanor; and on conviction shall be sentenced to pay a fine of not less than ten nor more than fifty dollars for the first offense, and not less than one hundred dollars for each subsequent offense. It shall be the duty of the Secretary of Agriculture to enforce the provisions of this act; and all penalties, costs, and fines recovered shall be paid to him or his duly authorized agent, and by him shall be immediately paid into the State Treasury, for the use of the Commonwealth.

Setion 7. The Secretary of Agriculture is hereby empowered to collect samples of the materials named in section one of this act, either in person or by his duly qualified agent or representative, to have them analyzed, and to publish the results for the information of the public; and for this purpose the said Secretary of Agriculture such assistants, agents, experts, chemists, detectives, and counsel as he shall duly authorize, shall have full access, ingress, and egress to and from all places of business, quarries, kilns, factories, barns

buildings, carriages, cars, and vessels used in the manufacture, storage, transportation, or sale of any of the said materials. They shall also have power to open any package or vessel containing or supposed to contain any of the said materials, and to take therefrom samples for analysis, upon tendering the value of said samples. Any manufacturer or producer of any of the materials named in section one of this act, located in the Commonwealth, shall be entitled to have a single sample of any distinct brand, for the sale of which he has paid the fee required by section five of this act, analyzed by the Department of Agriculture, under such regulations as the Secretary of Agriculture may prescribe with respect to the points of composition specified in said section one, upon sending sample properly sealed and carriage prepaid, together with a fee of one dollar for each such analysis; but not more than two brands shall be analyzed, under the privilege conferred by this proviso, for one manufacturer or producer in a single year. None of the provisions of this act shall apply to sales of limestone, or limestone products or marl, when such sales are made at the quarry or pit in bulk, and delivered to the wagons of the users, who are presumed to be acquainted with the qualities of the local products.

Section 8. To carry out the provisions of this act for the period ending June first, one thousand nine hundred and seventeen, the sum of four thousand dollars ($4,000), or so much thereof as may be necessary, is hereby specifically appropriated to the Department of Agriculture.

Section 9. This act shall go into effect on the first day of January, one thousand nine hundred and sixteen.

Approved—The 1st day of June, A. D. 1915.

LIST OF FERTILIZER MANUFACTURERS AND BRANDS OF THEIR FERTILIZERS FOR WHICH LICENSES TO SELL IN PENNSYLVANIA DURING 1920 WERE TAKEN OUT PRIOR TO MARCH 1, 1920.

THE ALLENTOWN MANUFACTURING CO., ALLENTOWN, PA.

Complete Phosphate.
Victory Phosphate.
Reliable Phosphate.
Amco Phosphate.
Quick Return Phosphate.

ALPHA PORTLAND CEMENT CO., EASTON, PA.

Alpha Potash-Lime Fertilizer.

THE ALPHANO HUMUS CO., NEW YORK CITY, N. Y.

Prepared Alphano Humus.

THE AMERICAN AGRICULTURAL CHEMICAL CO., NEW YORK CITY, N. Y.

14% Acid Phosphate.
16% Acid Phosphate.
Gem Phosphate.
Star Phosphate.
Dissolved Phosphate and Potash.
Ammoniated Superphosphate.
Soluble Grain Mixture.
Ammoniated Fertilizer A.
Animal Base Special.
Ammoniated Fertilizer AA.
High Grade Dissolved Bone.
Ammoniated Fertilizer AAA.
Ammoniated Fertilizer AAAA.
Royal Potash Mixture.
Matchless Potash Manure.
High Grade Crop Producer.
Special Potato Manure.
Dead Shot Phosphate.
Wizard Phosphate.
Fine Ground Bone.
Pure Bone Meal.
High Grade Ground Bone.
Basic Lime Phosphate.
Nitrate of Soda.
The Pathfinder, 1920.
Complete Manure.
Ground Tankage (9-9.15).
Ground Tankage (6-13.73).
The Pathfinder.
Boss Potash Fertilizer.
Phospho Plaster.
Superior Phosphate and Potash.
Crescent Complete Manure.
Allen's Special for Wheat and Grass.
Allen's Popular Phosphate.
Allen's Fish and Potash Mixture.
Bowker's Soluble Phosphate.
Bowker's 16% Acid Phosphate.
Bowker's Superphosphate with Potash.
Bowker's Superphosphate with Ammonia 1%.
Bowker's Superphosphate with Ammonia 2%.
Bowker's Superphosphate with Ammonia 3%.
Bowker's Superphosphate with Ammonia 4%.

Bowker's Corn and Grain Grower.
Bowker's Phosphate and Potash.
Bowker's Special Golden Harvest Fertilizer.
Bowker's Sure Crop Phosphate, Revised.
Bowker's Potash Fertilizer.
Bowker's Square Brand Farm and Garden Phosphate.
Bowker's Corn and Wheat Guano.
Bowker's Hill and Drill Phosphate.
Bowker's Lawn and Garden Dressing, Revised.
Bowker's All Round Fertilizer.
Bowker's Potato Special.
Bowker's General Crop Manure.
Bowker's Staple Phosphate.
Bradley's Phosphate and Potash,
Bradley's Special Superior Compound.
Bradley's Golden Crop Compound.
Bradley's Niagara Phosphate.
Bradley's New Method Fertilizer.
Bradley's King Philip, Revised.
Bradley's B. D. Guano.
Bradley's Unicorn.
Bradley's Half Century Fertilizer, Revised.
Bradley's Potato Manure.
Bradley's Patent Superphosphate, Revised.
Bradley's Truckers' Delight.
Bradley's Economy Fertilizer.
Canton Chemical Eagle Phosphate.
Canton Chemical Harrow Brand Crop Grower.
Canton Chemical Resurgam Guano.
Canton Chemical Baker's Special Wheat, Corn and Grass Mixture.
Canton Chemical Baker's Standard High Grade Guano.
Canton Chemical C C C Special Compound.
Canton Chemical Potato and Vegetable Manure.
Canton Chemical Potato Manure.
Canton Chemical Special Potato Manure.
Canton Chemical Baker's Fish Guano.
Josiah Cope's Acidulated Phosphate.
Josiah Cope's High Grade Superphosphate.
Josiah Cope's Universal Mixture, Revised.
Josiah Cope's Soluble Phosphate and Potash.
Josiah Cope's High Grade Phosphate and Potash.
Josiah Cope's Fish Phosphate.
Josiah Cope's Excelsior No. 1.
Josiah Cope's Excelsior No. 2.
Josiah Cope's Excelsior No. 3.
Josiah Cope's Wheat and Grass Special.
Josiah Cope's Spring and Fall Mixture.
Josiah Cope's Bono Phosphate.
Josiah Cope's Try Me.
Josiah Cope's Potato, Corn and Tobacco.
Josiah Cope's Bono Phosphate.
Josiah Cope's Fish Phosphate.
Crocker's General Crop Fertilizer.
Crocker's Universal Grain Grower.

Crocker's Complete Manure.
Crocker's Potato, Hop and Tobacco Fertilizer, Revised.
Crocker's Dissolved Phosphate and Potash.
Crocker's Farmers' Choice.
Crocker's Special Grain Grower.
Crocker's Special Colonial Fertilizer.
Crocker's Champion Potato Grower.
Crocker's New Rival Fertilizer.
Crocker's Harvest Jewel Fertilizer.
Crocker's High Grade Special.
Crocker's Wheat and Corn Fertilizer, Revised.
Crocker's Complete Wheat Grower.
Crocker's Special Cabbage and Potato Manure.
Crocker's Ammoniated Superphosphate.
Detrick's Paragon Ammoniated Phosphate and Potash.
Detrick's Special Ammoniated Compound.
Detrick's Imperial Compound.
Detrick's Corn and Oats Fertilizer.
Detrick's Standard Potash Fertilizer.
Detrick's Royal Crop Grower.
Detrick's Kangaroo Komplete Kompound.
Detrick's Quick Step Fertilizer.
East India Phosphate and Potash Mixture.
East India Special Improved Compound.
East India Early Market.
East India Hawkeye Fertilizer.
East India Economizer Phosphate.
East India Mayflower.
East India Potato and Garden Manure.
W. S. Farmer's Dissolved S. C. Phosphate.
W. S. Farmer's High Grade Superphosphate.
W. S. Farmer's Farmers' Alkaline Phosphate Revised.
W. S. Farmers' B. & P. Phosphate.
W. S. Farmer's Pelican Guano, 1920.
W. S. Farmer's All Crop Mixture, No. 1.
W. S. Farmer's All Crop Mixture, No. 2.
W. S. Farmer's All Crop Mixture, No. 3.
W. S. Farmer's General Crop Grower.
W. S. Farmer's Clyde Brand, 1916.
W. S. Farmer's Diamond Brand.
W. S. Farmer's Potash Guano.
W. S. Farmer's Harvest Queen.
W. S. Farmer's Fish Mixture.
W. S. Farmer's Standard Phosphate.
W. S. Farmer's Farmers' Alkaline Phosphate.
Great Eastern Special Crop Fertilizer.
Great Eastern General.
Great Eastern Northern Corn Special, 1920.
Great Eastern Vegetable, Vine and Tobacco Fertilizer.
Great Eastern Garden Special.
Ludlam's Cecrops High Grade Dissolved Phosphate.
Ludlam's Cecrops Economy.
Ludlam's Cecrops I X L, Revised.
Ludlam's Cecrops Phosphate and Potash.

Ludlam's Cecrops Bono Manure.
Ludlam's Cecrops Sickle Fertilizer, No. 1.
Ludlam's Cecrops Sickle Fertilizer, No. 2.
Ludlam's Cecrops Sickle Fertilizer, No. 3.
Ludlam's Cecrops No. 2 for Grain and Grass.
Ludlam's Cecrops Palmetto.
Ludlam's Cecrops Harvest Queen.
Ludlam's Cecrops Standard Potash.
Ludlam's Cecrops A. B. F.
Ludlam's Cecrops Standard.
Ludlam's Cecrops Dissolved Phosphate.
Michigan Carbon Works' Wheat and Grass Fertilizer.
Michigan Carbon Works' Red Line Phosphate with Potash.
Michigan Carbon Works' Red Line Complete Fertilizer.
Michigan Carbon Works' Red Line Guano.
Michigan Carbon Works' General Crop Fertilizer.
Michigan Carbon Works' Homestead Potato and Tobacco Fertilizer.
Michigan Carbon Works' Homestead Fertilizer.
Milsom's Crown Phosphate.
Milsom's Special Phosphate.
Milsom's Golden Eagle.
Milsom's Special Harrow Brand.
Milsom's Erie King Fertilizer.
Milsom's Wheat, Oats and Barley.
Milsom's Buffalo Guano.
Milsom's Special Soil Enricher.
Milsom's Old Pilot Phosphate, Revised.
Milsom's Corn Fertilizer.
Moro-Phillips' Wheat Special.
Moro-Phillips' C. & G. Complete Fertilizer.
Moro-Phillips' Farmers' Phosphate.
Moro-Phillips' Standard Guano.
Moro-Phillips' Pure Phuine.
Moro-Phillips' Potato and Truck Manure.
Nassau Soluble Phosphate.
Nassau High Grade Superphosphate.
Nassau Grass and Grain Fertilizer.
Nassau Royal Mixture, Revised.
Nassau Buckwheat Special.
Nassau Old Hickory, Revised.
Nassau Common Sense Fertilizer, Revised.
Nassau Ammoniated Potato Compound.
Nassau Ammoniated Truck Producer.
Nassau Practical Fertilizer.
Nassau Wheat and Grass Grower.
Nassau General Favorite.
Nassau Plow Brand.
Nassau Potato Manure.
Nassau Wheat and Grass Grower, 1916.
Nassau Potato Manure, 1916.
North Western Horseshoe Brand.
North Western Complete Compound.
North Western Puritan Phosphate.

North Western Challenge Fertilizer, Revised.
North Western Shawnee Phosphate.
North Western Beaver Brand Phosphate.
North Western Success Phosphate.
Packer's Union Universal Fertilizer, 1920.
Packer's Union Animal Corn Fertilizer.
Packer's Union Potato Manure, 1920.
Patapsco Pure Dissolved S. C. Phosphate.
Patapsco High Grade Acid Phosphate.
Patapsco Soluble Phosphate and Potash.
Patapsco Ammoniated Compound.
Patapsco Golden Crop Fertilizer, Revised.
Patapsco Trucker's Delight.
Patapsco General Crop Producer.
Patapsco Money Maker.
Patapsco Grain and Grass Producer.
Patapsco Coon Brand Guano, 1916, Revised.
Patapsco Fish Guano, Revised.
Patapsco Vegetable and Corn Fertilizer.
Perkins' Globe Phosphate.
Perkins' Special Bono Manure.
Read's Champion Phosphate.
Read's Practical Grain Grower.
Read's Leader Fertilizer, 1920.
Read's Pioneer Fertilizer.
Read's Standard Superphosphate.
Read's Farmers' Friend Superphosphate, Revised.
Read's Corn, Wheat and Rye.
Read's Special Vegetable and Vine Fertilizer, Revised.
Read's High Grade Farmers' Friend, Revised.
Reese's Half and Half.
Reese's Challenge Crop Grower.
Reese's Pilgrim Fertilizer.
Reese's Harvest Queen.
Reese's Ammoniated Phosphate Mixture.
Reese's Mayflower.
Reese's Potato Manure, Revised.
Reese's Truck Special.
Schaal-Sheldon's Soluble Phosphate.
Schaal-Sheldon's Phosphate and Potash.
Schaal-Sheldon's Ammoniated Superphosphate, X.
Schaal-Sheldon's Ammoniated Superphosphate, No. 1.
Schaal-Sheldon's Ammoniated Superphosphate, No. 2.
Schaal-Sheldon's Ammoniated Superphosphate, No. 3.
Schaal-Sheldon's Royal.
Schaal-Sheldon's Farmer's Favorite.
Schaal-Sheldon's Guano.
Schaal-Sheldon's Grass, Wheat and Oats.
Schaal-Sheldon's Corn and Potato.
Schaal-Sheldon's Truckers Manure.
Sharpless & Carpenter No. 2 for Grain and Grass.
Sharpless & Carpenter Royal Spring Mixture.
Sharpless & Carpenter Farmers' Brand Phosphate.

Shrapless & Carpenter Complete Manure, Revised.
Sharpless & Carpenter Potato, Corn and Truck Guano, Revised.
Sharpless & Carpenter No. 1 Brand Phosphate.
Sharpless & Carpenter Fish Guano Special.
Sharpless & Carpenter Potato Manure.
Sharpless & Carpenter Soluble Tampico Guano, Revised.
Susquehanna Dissolved S. C. Rock.
Susquehanna High Grade Superphosphate.
Susquehanna Alkaline Phosphate.
Susquehanna Grain and Grass Producer.
Susquehanna Arrow Brand.
Susquehanna Winner Phosphate.
Susquehanna Crop Grower.
Susquehanna XXV Phosphate.
Susquehanna Ammoniated Phosphate, Revised.
Susquehanna Potato and Tobacco Phosphate.
Susquehanna Sure Crop.
Tygert-Allen's Standard Crop Grower.
Tygert-Allen's Standard Brand Phosphate.
Tygert-Allen's Star Brand Phosphate, Revised.
Tygert-Allen's High Grade Special Fertilizer.
Tygert-Allen's Success Phosphate.
Tygert-Allen's Star Potato Guano.
Tygert-Allen's Potato and Truck Fertilizer.
Whann's Chester Valley Liberty Brand Superphosphate, A.
Whann's Chester Valley Liberty Brand Superphosphate, AA.
Whann's Chester Valley Liberty Brand Superphosphate, AAA.
Whann's Chester Valley Liberty Brand Superphosphate, AAAA.
Whann's Chester Valley General Crop.
Whann's Chester Valley Tomato and Potato Special.
Whann's Chester Valley Standard Fertilizer.
Whann's Chester Valley Complete Fertilizer.
Whann's Chester Valley Potato Special.
Whann's Chester Valley Fish and Potash Fertilizer.
Whann's Chester Valley Special Potato and Truck Fertilizer, Revised.
Whann's Chester Valley Special Ammoniated Superphosphate, Revised.
Whann's Chester Valley Available Ammoniated Superphosphate, Revised.
Wheeler's Peerless Acid Phosphate.
Wheeler's High Grade Acid Phosphate.
Wheeler's Wheat and Clover Fertilizer.
Wheeler's Banner Wheat Grower.
Wheeler's Ammoniated Corn Phosphate.
Wheeler's Success Fertilizer.
Wheeler's Royal Wheat Grower.
Wheeler's Corn Fertilizer.
Wheeler's Potato Manure, 1920.
Williams & Clark's Triumph Phosphate.
Williams & Clark's Sterling Mixture.
Williams & Clark's Mammoth Crop Producer.
Williams & Clark's Prolific Fertilizer.
Williams & Clark's Royal Phosphate, Revised.
Williams & Clark's Elk Brand.
Williams & Clark's Matchless Fertilizer.

Williams & Clark's Potato Manure.
Williams & Clark's Meadow Queen Fertilizer.
Williams & Clark's Special Prolific Crop Producer.
Zell's Electric Phosphate.
Zell's Little Treasure.
Zell's Economizer Phosphate.
Zell's Hustler Phosphate.
Zell's Ammoniated Superphosphate.
Zell's Special Compound for Potatoes and Vegetables.
Hostetler's Special Pure Bone, Potash and Acid Phosphate Mixture.

AMERICAN ALKALI AND ACID CO., BRADFORD, PA.-

Triple A.

AMERICAN FERTILIZING CO., BALTIMORE, MD.

American Best Potato Formula.
American Best Crop Formula.
American Excelsior Guano.
American Best Grain and Grass Formula.
American Fish and Bone Compound.
American Grain and Grass Grower.
American Premium Grain and Clover Mixture.
American Eagle Crop Grower.
American Ammoniated Crop Compound.
American Reliable Guano.
American Emergency Special Compound.
American Special Half Percent Formula.
American Fish and Bone Special.
American Champion Ammoniated Phosphate.
American Special Fish Guano.
American Eagle Superphosphate.
American Formula for Wheat and Corn.
American Dissolved Phosphate and Potash.
American Phosphate and Potash.
American High Grade Acid Phosphate.
American Acid Phosphate.

ARMOUR FERTILIZER WORKS, BALTIMORE, MD.

ARMOUR BRANDS:
Acid Phosphate.
Phosphate and Potash, No. 1.
Wheat and Clover.
Armour's 1-10-0.
Grain Special.
Cereal Special, No. 4.
Wheat, Corn and Oats Special.
Crop Grower.
Royal Ammoniated.
Grain Grower.
Cereal Special, No. 3.
Cereal Special, No. 2.
Cereal Special, No. 1.

Potato and Vegetable Special.
Potato Grower.
Fruit and Root Crop Special.
Nitrate of Soda.
Bone Meal.

TUSCARORA BRANDS:

Tuscarora Acid Phosphate.
Tuscarora Phosphate and Potash.
Tuscarora Grain Special.
Tuscarora Ammoniated Phosphate.
Tuscarora Crop Grower.
Tuscarora Standard.
Tuscarora Fruit and Root Crop Special.

ASSOCIATED CHEMICAL CO., HAGERSTOWN, MD.

Fine Bone Meal.
Nitrate of Soda.

BALTIMORE FERTILIZER CO., BALTIMORE, MD.

Old Honesty.
Honest Tankage Rock and Potash.
Honest Crop Grower.
Honest Potato Grower.
Honest 12 & 2.
Honest 16% Acid Phosphate.

BAUGH & SONS CO., PHILADELPHIA, PA.

Baugh's Raw Bone Meal.
Baugh's Pure Steamed Bone.
Baugh's Peninsula Grain Producer.
Baugh's Corn and Oats Fertilizer.
Baugh's The Old Stand-By: Dissolved Animal Base.
Baugh's Truckers Favorite.
Baugh's High Grade Ammoniated Animal Base.
Baugh's General Crop Grower.
Baugh's Excelsior Guano.
Baugh's Double Eagle Phosphate.
Baugh's Animal Base and Potash Compound.
Baugh's Complete Animal Base Fertilizer.
Baugh's Grand Rapid High Grade Guano.
Baugh's Peruvian Guano Substitute.
Baugh's Soluble Alkaline Super Phosphate.
Baugh's Phosphate and Potash Mixture.
Baugh's 14% Acid Phosphate.
Baugh's 16% Acid Phosphate.
Baugh's Wheat Fertilizer for Wheat and Grass.
Baugh's Half and Half Mixture.
Baugh's Phosphate and Potash Mixture.
Baugh's Special Potato Manure.
Baugh's Fish Mixture.

Nitrate of Soda.
High Grade Ground Tankage.
Genuine German Kainit.

BERGER BROS., EASTON, PA.

Peerless Phosphate, Revised.
Lehigh Superphosphate, 1920.

BOWKER FERTILIZER CO., SUBSIDIARY OF THE AMERICAN AGRICULTURAL CHEMICAL CO., NEW YORK CITY, N. Y.

Bowker's Soluble Phosphate.
Bowker's Acid Phosphate.
Bowker's Phosphate and Potash.
Bowker's Superphosphate with Potash.
Bowker's Special Golden Harvest Fertilizer.
Bowker's Superphosphate with Ammonia 1%.
Bowker's Superphosphate with Ammonia 2%.
Bowker's Superphosphate with Ammonia 3%.
Bowker's Superphosphate with Ammonia 4%.
Bowker's Staple Phosphate.
Bowker's Sure Crop Phosphate, Revised.
Bowker's Corn and Grain Grower.
Bowker's Potash Fertilizer.
Bowker's Square Brand Farm and Garden Phosphate.
Bowker's Corn and Wheat Guano.
Bowker's Hill and Drill Phosphate.
Bowker's Lawn and Garden Dressing, Revised.
Bowker's All Round Fertilizer.
Bowker's Potato Special.
Bowker's Fresh Ground Bone.
Bowker's Bone Flour for Florist Use.
Bowker's Nitrate of Soda.
Bowker's O. I. O. Phosphate.
Bowker's Lawn and Garden Dressing, 1918.

THE BRYANT FERTILIZER CO., ALEXANDRIA, VA.

Bryant's 16% Acid Phosphate.
Bryant's Winner, 3-10-6.
Bryant's Winner, 2-12-2.

BUTLER HIDE AND FUR CO., BUTLER, PA.

Animal Tankage.

CAMBRIA FERTILIZER CO., JOHNSTOWN, PA.

Pure Fine Ground Bone Dust.
Standard Phosphate.
Corn and Potato Phosphate.

THE CENTRAL CHEMICAL CO., HAGERSTOWN, MD.

Golden Sheaf.
Crown Jewel.
Grain and Grass Grower.
Eclipse Brand.
Commonwealth.
Valley Mixture.
Ammoniated Phosphate.
Phoenix Brand.
Dissolved Phosphate.
Fish Compound.
Truck Special.
Farmers Compound.
Superior.
Planters Compound.
Pride of the Valley.
Acme Brand.
Dissolved Bone Compound.
Dissolved Phosphate, 14%.
Top Dresser.
Canner's Special.
Potato and Truck Grower.
Potato Special.

THE CHESAPEAKE CHEMICAL CO., BALTIMORE, MD.

Chesapeake Favorite Producer.
Chesapeake Favorite Guano.
Chesapeake Ammoniated Phosphate.
Chesapeake 2-8-5 Special.
Chesapeake 2-8-3 Special.
Chesapeake Nat. Crop Grower.
Chesapeake Buyers Favorite.
Chesapeake 1-8-3 Fertilizer.
Chesapeake Money Producer.
Chesapeake Gem Phosphate.
Chesapeake 1-7-4 Fertilizer.
Chesapeake ½-7-0 Fertilizer.
Chesapeake High Grade Potash Mixture.
Chesapeake Reliable 10-2 Fertilizer.
Chesapeake 16% Dissolved Phosphate.
Chesapeake 14% Dissolved Phosphate.
Chesapeake Fish and Potash Mixture.

THE COE-MORTIMER CO., SUBSIDIARY OF THE AMERICAN AGRICULTURAL CHEMICAL CO., NEW YORK CITY, N. Y.

E. Frank Coe's High Grade Soluble Phosphate.
E. Frank Coe's 16% Superphosphate.
E. Frank Coe's Famous Prize Brand.
E. Frank Coe's Big 15 Mixture.
E. Frank Coe's XXV Ammoniated Phosphate, 1916.
E. Frank Coe's Original Ammoniated Dissolved Phosphate, 1916.

E. Frank Coe's High Grade Ammoniated Superphosphate, 1916.
E. Frank Coe's Prolific Crop Producer, 1916.
E. Frank Coe's New Englander Special.
E. Frank Coe's Western New Yorker.
E. Frank Coe's Pennsylvania No. 1 Grain Special, 1916.
E. Frank Coe's Knickerbocker Phosphate.
E. Frank Coe's Columbian Corn and Potato Fertilizer.
E. Frank Coe's Gold Brand Excelsior Guano, Revised.
E. Frank Coe's Corn King.
E. Frank Coe's Top Dressing Manure, Revised.
E. Frank Coe's Celebrated Special Potato Fertilizer, Revised.
E. Frank Coe's Tobacco Special.
E. Frank Coe's Tobacco Leaf Fertilizer.
E. Frank Coe's Grain Grower, 1916.
E. Frank Coe's Basic Fruit and Legume Phosphate (Basic Lime Phosphate) (Key-Plow Brand).
Fine Ground Bone.
Nitrate of Soda.

COLUMBIA GUANO CO., BALTIMORE, MD.

Columbia 14% Acid Phosphate.
Columbia 16% Acid Phosphate.
Columbia 10-2 Phosphate and Potash.
Columbia 10-4 Phosphate and Potash.
Columbia 12-3 Phosphate and Potash.
Columbia 12-5 Phosphate and Potash.
Columbia Winner Brand.
Columbia Gem Brand.
Columbia Duplex Brand.
Columbia Quality Brand.
Columbia Big Dipper Brand.
Columbia Goodwill Guano.
Columbia Capital Guano.
Columbia Extra Dry Guano.
Columbia Triangle Potato Guano.
Columbia Soluble Guano.
Columbia Fish and Potash.
Columbia Prize Guano.
Columbia Congress Brand.

THE CONSUMERS CHEMICAL CORPORATION, NEW YORK CITY, N. Y.

Diamond Phosphate.
Sterling Phosphate.
Elmash Phosphate.
Capitol Brand.
Old Colony Brand.
Oxbow Brand.
Little Prince Brand.
Old Hickory Brand.
Victor Brand.
Great Gardener Brand.
Truckers Pride Brand.
Big Helper Brand.

B-M Phosphate.
Bone Meal.
Nitrate of Soda.

DEXTER PORTLAND CEMENT CO., NAZARETH, PA.

Dexter Potash Lime Fertilizer.

JACOB DOLD PACKING CO., BUFFALO, N. Y.

Dold Quality Bone Meal.

HENRY A. DREER, INC., PHILADELPHIA, PA.

Dreer's Peerless Plant Food.

DUBOIS FERTILIZER WORKS, INC., DUBOIS, PA.

DuBois Grain and Corn.
DuBois Superb Fertilizer.
DuBois General Crop Grower.
DuBois Grain Grower.
DnBois Corn Special.
DuBois Potato and Truck.
DuBois Special Tobacco Fertilizer.
DuBois Phosphate and Potash Fertilizer.
DnBois Potash Mixture.
DnBois 16% Acid Phosphate Fertilizer.
DnBois 14% Acid Phosphate Fertilizer.
DuBois Lime Phosphate.
DuBois Bone Meal.
DuBois Hi Grade Fertilizer.

THE DUNGAN FERTILIZER CO., DOYLESTOWN, PA.

Pebble Hill Home Made Animal Mixture.
Farmers Favorite.
Potato Manure.

EASTERN GUANO CO., NEW YORK CITY, N. Y.

Eastern Farmers Compound.
Eastern Fish Mixture.
Eastern Planters Pride.
Eastern Crop Grower.
Eastern Dissolved Phosphate.
Eastern Dissolved Phosphate, 14%.
Eastern Anchor Brand.
Eastern Valley Qneen.

AMOS EBY & CO., LEAMAN PLACE, PA.

Pequea High Grade.
Pequea Special Potato.
Peqnea Valley Fertilizer.
Pequea Economy.
Pequea Ammoniated.
Pequea Crop Grower.
Farmers Mixture.

THE ERIE REDUCTION CO., ERIE, PA.

Acidulated Fish Special.
General Crop Special.

EUREKA CHEMICAL CO., BALTIMORE, MD.

Eureka Potato and Vegetable.
Eureka Farmers' Favorite.
Eureka Dissolved Animal Base.
Eureka Corn and Potato.
Eureka Fish and Potash.
Eureka Fish and Potash, No. 1.
Eureka Alkaline, No. 2.
Eureka Grain and Grass.
Eureka Acid Phosphate.

THE EUREKA FERTILIZER CO., LANCASTER, PA.

No. 1 High Grade Trucker.
No. 2 Farmers Favorite.
No. 3 Potato and Vegetable.
No. 4 Wheat Special.
No. 7 Grain and Grass.
No. 8 Fish and Bone Mixture.
No. 9 Corn and Potato.
No. 10 Corn and Oats.

THE FARMERS FERTILIZER WORKS, ELIZABETHTOWN, PA.

Nitrate of Soda.
Grain and Grass Special.
Farmers Crop Grower.
Farmers Golden Sheaf.
Farmers I. X. L.
Special Compound.
Farmers Club Brand.
Pride of Donegal.
Acid Phosphate.
Acid Phosphate.
Farmers Economy.
Farmers Tobacco Special.
Special Potato and Tobacco Manure.
Farmers Top Dressing.

THE FERTILE CHEMICAL CO., CLEVELAND, O.

Nitro-Fertile.
Lime-Fertile.

JOSEPH R. GAWTHROP. KENNETT SQUARE, PA.

Special Potato Phosphate.
Ammoniated Special Phosphate for Corn, Oats and Wheat.
Champion Fertilizer for Wheat and Grass.

J. C. GERBIG & SON, CHAMBERSBURG, PA.

Pure Ground Bone.

GODFREY FERTILIZER AND CHEMICAL CO., NEWARK, N. J.

Godfrey's 16% Acid Phosphate.

GRIFFITH & BOYD CO., BALTIMORE, MD.

Stable Manure Substitute.
Tobacco and Vegetable Grower.
Special Formula.
Standard Guano.
Special Guano.
General Crop Grower.
Farmers Potato Manure.
Fish and Potash Guano.
Fish Bone and Potash.
Farmers Queen.
Royal Potash Guano.
Cereal Plant Food.
Reliable Crop Grower.
Valley Fertilizer.
Peerless Fertilizer.
Economizer.
Pure Fine Ground Bone Meal.
Soft Ground Bone Meal.
Pure Dissolved Animal Bone.
Grain and Grass Grower.
Farmers Mixture.
Fish and Bone Mixture.
Special Fish Mixture.
Farmers Gem.
Queen Guano.
Cereal Mixture.
Peerless Mixture.
High Grade 16% Acid Phosphate.
High Grade Acid Phosphate.
Special Grain Grower.
XX Potash Manure.
Blood and Bone Mixture.
Nitrate of Soda.
Griffith & Boyd Co's. Nitro Crop Feeder.

HAFLEIGH & CO., PHILADELPHIA, PA.

Pure Raw Bone Meal.

S. M. HESS & BROTHER, INC., PHILADELPHIA, PA.

High Grade Acid Phosphate.
Special High Grade Acid Phosphate.
Soluble Phosphate and Potash.
Ammoniated Grain Grower.

Standard Super Phosphate.
Superior Super Phosphate.
Keystone Phosphate.
Farmers' General Fertilizer, 1916.
Special Corn Manure.
Wheat and Grass Manure.
Special Compound.
Ammoniated Super Phosphate.
Fish and Potash Manure.
Potato Crop Grower.
Superior Potato Manure.
Grass Top Dresser.
Fine Ground Bone.
High Grade Ground Bone.
Reliable Super Phosphate.

P. HOFFMAN & BRO., RAUBVILLE, PA.

Hoffman's All Crops.
Hoffman's Special.

M. P. HUBBARD CO., INC., BALTIMORE, MD.

Hubbard's Special Potato and Tomato.
Hubbard's Fish Phosphate and Potash.
Hubbard's Big Jim Compound.
Hubbard's Dissolved Phosphate.
Hubbard's Celebrated Phosphate for General Use.
Hubbard's Excelsior.
Hubbard's Ever Ready.
Hubbard's Old Economy Best for the Money.
Hubbard's Special Formula.
Hubbard's Acme.
Hubbard's Soluble Phosphate.
Hubbard's Soluble Phosphate and Potash.
Hubbard's Good and Cheap.
Hubbard's Active Phosphate.

THE HUBBARD FERTILIZER CO., BALTIMORE, MD.

Hubbard's Ammoniated Fertilizer.
Hubbard's Improved Guano.
Hubbard's Excelsior Mixture.
Hubbard's Money Maker Fertilizer.
Hubbard's Standard Phosphate.
Hubbard's Farmers I. X. L.
Hubbard's Oriental Guano.
Hubbard's 1-8-3 Fertilizer.
Hubbard's English Compound.
Hubbard's Columbia Phosphate.
Hubbard's Climax Phosphate.
Hubbard's ½-7-0 Fertilizer.
Hubbard's High Grade Potash Mixture.
Hubbard's Phosphate and Potash.
Hubbard's 16% Phosphate.

Hubbard's 14% Phosphate.
Hubbard's Fish and Potash Mixture.
Hubbard's 9-0-3 Top Dresser.
Nitrate of Soda.

INTERNATIONAL AGRICULTURAL CORP., BUFFALO FERTILIZER WORKS, BUFFALO, N. Y.

Buffalo Onion, Vegetable and Potato.
Buffalo Ideal Wheat and Corn.
Buffalo Economy.
Buffalo Ammoniated Phosphate.
Buffalo Tip Top.
Buffalo Farmers Choice.
Buffalo General Favorite.
Buffalo Crop Grower.
Buffalo Acid and Potash.
Buffalo Phosphate and Potash.
Buffalo Sixteen Percent.
Buffalo Two Ten.
Buffalo Bone Meal.
I. A. C. Potato and Vegetable.
I. A. C. Complete.
I. A. C. Corn and Grain.
I. A. C. One Ten Two.
I. A. C. Victory.
I. A. C. General Crop.
I. A. C. Alkaline.
I. A. C. Acid Phosphate.
Nitrate of Soda.

THE JARECKI CHEMICAL CO., SANDUSKY, OHIO.

Lake Erie Guano with Phosphate and Potash.
Tobacco and Truck Grower.
Little Giant.
Acid Phosphate.
Super Phosphate and Potash.
Clay Soil Special.
Middle West Formula.
C. O. D. Phosphate.

T. S. KENDERDINE & SON, NEWTOWN, PA.

Kenderdine's B. Phosphate.
Kenderdine's Potato Phosphate.
Kenderdine's Ammoniated Phosphate.
Nitrate of Soda.

KEYSTONE BONE FERTILIZER CO., PHILADELPHIA, PA.

Keystone Blue Ribbon Potato Manure.
Keystone X. L. Potato Manure.
Keystone Mercer County Potato Special.
Keystone Gold Medal Special.

Keystone Supreme Potato and Truck Manure.
Keystone Extra Potato Manure.
Keystone Royal Corn and Potato Manure, Revised.
Keystone Corn and Cereal Grower.
Keystone Grain and Grass Manure.
Keystone High Grade Truck Guano.
Keystone Special Potato and Tomato Mixture.
Keystone Standard Potato Manure, Revised.
Keystone Ammoniated Superphosphate.
Keystone Special Pennsylvania Grain Mixture.
Keystone Excelsior Wheat Grower.
Keystone General Manure.
Keystone Economy Grain Compound.
Keystone 16% Acid Phosphate.
Keystone Phosphate and 4% Potash.

KEYSTONE GRANGE EXCHANGE, MANSFIELD, PA.

Grangers Special.
Grangers Choice.
Grangers Best Mixture.
Grangers Acid Phosphate.

THE LANCASTER BONE FERTILIZER CO., LANCASTER, PA.

Potato, Tobacco and Truck Manure.
Grange Special.
Tobacco and Potato Compound.
Potato, Fruit and Vegetable.
Corn, Grass and Wheat Special.
Lancaster Favorite.
Ammoniated Bone Manure.
Harvest King.

THE LANCASTER CHEMICAL CO., LANCASTER, PA.

No. 1 Tobacco and Vegetable.
No. 2 Dewey Brand.
No. 3 Dissolved Animal Bone and Potash.
No. 4 Rising Sun.
No. 5 Flag Brand.
No. 6 Grain Special.
No. 9 Bone Meal.
No. 10 Economist.
No. 11 Keystone Brand.
No. 12 Wheat Special.
No. 13 Special Potash Manure.
No. 14 Wheat and Grass.
No. 15 General Crop Special.
No. 16 Phos. Acid Special.
No. 18 Success Brand.
No. 19 Potato Special.

LEBANON FERTILIZER WORKS, LEBANON, PA.

Levan's Truckers Favorite.
Levan's Farmers Standard.
Levan's Special Tobacco Compound.
Levan's Lebanon Special.
Levan's Farmers Favorite.
Levan's Golden Sheaf.
Levan's Plow Brand.
Levan's Ammoniated Super-Phosphate.
Levan's Farmers Mixture.
Levan's Farmers Crop Grower.
Levan's Standard Potash Compound.
Levan's Planters Pride.
Levan's Super-Phosphate.
Levan's Dissolved Phosphate.
Levan's Pure Fine Ground Bone Meal.
Levan's Animal Tankage.
Nitrate of Soda.

LISTERS AGRICULTURAL CHEMICAL WORKS, NEWARK, N. J.

Listers Buyer's Choice Acid Phosphate.
Listers High Grade Acid Phosphate.
Listers Dissolved Phosphate and Potash.
Listers Special Compound.
Listers Grain and Grass Fertilizer, Revised.
Listers Soluble Crop Grower.
Listers Soil Improver.
Listers Plant Food, 1916.
Listers Crescent Ammoniated Superphosphate, 1916.
Listers Excelsior Guano, 1916.
Listers Superior Ammoniated Superphosphate, 1916.
Listers Special Crop Producer.
Listers Squirrel Brand Fertilizer.
Listers Fish Brand Fertilizer.
Listers Harvest Queen Phosphate, Revised.
Listers G. Brand.
Listers Valley Brand Fertilizer.
Listers Success Fertilizer.
Listers U. S. Superphosphate.
Listers Corn and Potato Fertilizer.
Listers Special Wheat Fertilizer.
Listers Special Tobacco Fertilizer.
Listers Ammoniated Dissolved Superphosphate, Revised.
Listers Big Crop Grower.
Listers Wheat and Rye Fertilizer.
Listers Standard Pure Superphosphate of Lime.
Listers Special Truck Fertilizer.
Listers Golden Sheaf.
Listers Bone Meal, 1916.
Listers Celebrated Ground Bone and Tankage, Acidulated.
Listers Ground Tankage.
Listers Lime Phosphate.
Nitrate of Soda.

THE MAPES FORMULA & PERUVIAN GUANO CO., NEW YORK CITY, N. Y.

The Mapes Potato Manure.
The Mapes Potato Manure (1916 Brand).
The Mapes General Truck Manure.
The Mapes Corn Manure.
The Mapes General Tobacco Manure.
The Mapes Tobacco Starter, Improved.
The Mapes Grain Brand.
The Mapes General Crop (1916 Brand).

WM. HENRY MAULE, INC., PHILADELPHIA, PA.

Panmure Plant Food.

THE MILLER FERTILIZER CO., BALTIMORE, MD.

Miller's Standard Phosphate.
Miller's Pimlico.
Miller's Farmer's Profit.
Miller's Unexcelled.
Miller's No. 1 Special.
Miller's Potato and Vegetable Grower.
Miller's Acme.
Miller's Ammoniated.
Miller's Clermont.
Miller's Harvest Queen.
Miller's Hustler Phosphate.
Miller's Club Brand.
Miller's Alkaline Mixture.
Miller's Clinch Phosphate.
Miller's Acid Phosphate, 16%.
Miller's Acid Phosphate, 14%.
No. 1 Potato and Vegetable Grower.
Nitrate of Soda.

G. OBER & SONS CO., BALTIMORE, MD.

Ober's Fruit and Vine Truck Guano.
Ober's Special Plant Food.
Ober's Sea Bird Guano.
Ober's Golden Seal Tobacco Guano.
Ober's Stag Guano.
Ober's Sol. Ammo. Super Phos. of Lime.
Ober's Standard Potash Compound.
Ober's 10% Super Phos. and Potash.
Ober's Spec. Tobacco and Truck Guano.
Ober's Climax Ammo. Compound.
Ober's Electro Compound.
Ober's Liberty Fish Guano.
Ober's Sun Beam Guano.
Ober's High Grade Acid Phos. 16%.
Ober's Dissolved Phos, 14%.
Pure Bone Meal.

Pure Raw Bone Meal.
Ober's Farmer Mixture.
Ober's Independent Ammo. Super Phos.
Ober's Peerless Potash Compound.

ODORLESS EXCAVATING AND MANUFACTURING CO., PHILADELPHIA, PA.

Pouderette.

OXFORD PACKING WORKS, OXFORD, PA.

O. P. W. No. 1.
O. P. W. Special.
O. P. W. No. 2.
O. P. W. Acid Phosphate.
O. P. W. Rock and Potash.

OYLER & SPANGLER FERTILIZER WORKS, GETTYSBURG, PA.

Special.
Super-Phosphate.
Gettysburg.
16 per cent.
Crop Grower.

PATAPSCO GUANO COMPANY, SUBSIDIARY OF THE AMERICAN AGRICULTURAL CHEMICAL CO., BALTIMORE, MD.

Patapsco Pure Dissolved S. C. Phosphate.
Patapsco High Grade Acid Phosphate.
Patapsco Soluble Phosphate and Potash.
Patapsco Phospho Potash.
Patapsco Farmers Delight.
Patapsco Ammoniated Compound.
Patapsco Golden Crop Fertilizer, 1916.
Patapsco Truckers Delight.
Patapsco General Crop Producer.
Patapsco B. B. and P. Brand, Revised.
Patapsco Money Maker.
Patapsco Grain and Grass Producer.
Patapsco Vegetator.
Patapsco Big Chief Brand with Potash.
Patapsco Planters Delight, 1917.
Patapsco Tobacco and Potato Fertilizer, Revised.
Patapsco Vegetable and Corn Fertilizer.
Patapsco Potato Manure, With Potash.
Patapsco Special Early Trucker, Revised 1920.
Patapsco H. G. Ground Bone.
Patapsco Fine Ground Bone.
Baltimore Soluble Phosphate.
Sea Gull Guano.
Coon Brand Guano, 1916.
Basic Lime Phosphate.

PIEDMONT, MT. AIRY CO., BALTIMORE, MD.

Piedmont 16% Acid Phosphate.
Piedmont Special Crop Grower.
Piedmont Insula Fish Guano.

Piedmont Utility Fertilizer.
Levering's Excelsior.
Levering's Harvest Queen.
Levering's Ammoniated Bone.

PITTSBURGH PROVISION AND PACKING COMPANY, PITTSBURGH, PA.

No. 1 Pure Raw Bone Meal.
Bone Meal Fertilizer.
Pure Bone and Meat.
Keystone Fertilizer.
Lawn Fertilizer.
Guano Fertilizer.
High Grade Acid Phosphate.
Nitrate of Soda.
Pure Raw Bone Meal Flour.
Smith's Grower.

THE POLLOCK FERTILIZER CO., SUBSIDIARY OF THE AMERICAN AGRICULTURAL CHEMICAL CO., BALTIMORE, MD.

Pollock's Dissolved S. C. Phosphate.
Pollock's High Grade Superphosphate.
Pollock's Victor Brand, Revised.
Pollock's Soluble Phosphate.
Pollock's Star Alkaline Phosphate.
Pollock's Our Brand Guano.
Pollock's Ammoniated Fertilizer, A.
Pollock's Ammoniated Fertilizer, AA.
Pollock's Corn and Oats Special.
Pollock's Corn, Wheat and Tomato Guano.
Pollock's Special Wheat and Corn Fertilizer.
Pollock's Crop Invigorator.
Pollock's Bull's Eye Guano.
Pollock's Special Potato and Tobacco Fertilizer.

RASIN-MONUMENTAL COMPANY, BALTIMORE, MD.

Rasin's Best Potato Formula.
Rasin's Best Crop Formula.
Rasin's Universal Crop Manure.
Rasin's Best Grain and Grass Formula.
Rasin's National Crop Compound.
Rasin's Royal Fish, Bone and Potash.
Rasin's Capital Grain and Clover Compound.
Rasin's Capital Grop Compound.
Rasin's United Grain Grower.
Rasin's Royal Manure.
Rasin's Half and Half Special.
Rasin's Special Fish and Bone Guano.
Rasin's Special Fish Mixture.
Rasin's Royal Ammoniated Superphosphate.
Rasins' Special Phosphate and Potash.
Rasin's Special Potash Mixture.
Rasin's Special Alkaline Mixture.
Rasin's Phosphate and Potash Fertilizer.
Rasin's Phosphate and Potash.
Rasin's 16% Acid Phosphate.
Rasin's Acid Phosphate.

Rasin's Seawall Special.
Rasin's Wheat, Corn and Oats Mixture.
Wm. Penn Crop Grower.

THE READING BONE FERTILIZER COMPANY, READING, PA.

Farmers Tankage and Potash, for Corn, Grain and Grass.
Reading One, Eight and Five.
Blood, Meat and Potash Mixture.
Economy Brand.
High Grade Truck Food.
Truck, Fruit, Tree, Vine, Potato and Tobacco Grower.
Animal Tankage Mixture.
Reading All Crop Special.
Reading Special Potato and Tobacco.
Dissolved Animal Matter.
Reading Special XX Grain and Grass Producer.
14% Clear Acid Phosphate.
16% Clear Acid Phosphate.
Pure Bone Meal.
7% Animal Tankage.
Nitrate of Soda.
Reading Four, Eight and Six.

A. F. REES, HANOVER, PA.

Rees' Hanover Special.
Rees' York County Special.
Rees' Bone and Tankage.

ROBERT A. REICHARD, ALLENTOWN, PA.

Reichard's Special Manure.
Reichard's Steamed Bone.
Reichard's Mortgage Lifter.
Reichard's Surpass Phosphate.
Reichard's Lehigh Special.
Reichard's Farmer's Favorite.
Reichard's American Eagle.
Reichard's Universal Phosphate.
Reichard's Acid Phosphate.

F. S. ROYSTER GUANO COMPANY, BALTIMORE, MD.

Royster's 14% Acid Phosphate.
Royster's 16% Acid Phosphate.
Royster's 8-5 Phosphate and Potash.
Royster's 10-2 Phosphate and Potash.
Royster's 10-4 Phosphate and Potash.
Royster's 12-3 Phosphate and Potash.
Royster's 12-5 Phosphate and Potash.
Royster's Purity Brand.
Royster's Royal Blue Brand.
Royster's Meteor Brand.

Royster's Honor Brand.
Royster's Keystone Brand.
Royster's Simplex Brand.
Royster's Cuckoo Guano.
Royster's Economy Guano.
Royster's Wonder Guano.
Royster's Fish and Potash.
Royster's Dreadnought Guano.
Royster's Penn Potato Guano.
Royster's Bully Guano.
Royster's Vim Guano.
Royster's Fine Ground Bone Meal.
Royster's Pure Raw Bone Meal.
Royster's Security Brand.
Royster's Fish, Flesh and Fowl.
Nitrate of Soda.

SCHAAL-SHELDON FERTILIZER CO., SUBSIDIARY OF THE AMERICAN AGRICULTURAL CHEMICAL CO., BUFFALO, N. Y.

Dissolved Phosphate.
Soluble Phosphate.
Ammoniated Superphosphate, X.
Ammoniated Superphosphate, No. 1.
Ammoniated Superphosphate, No. 2.
Ammoniated Superphosphate, No. 3.
Phasphate and Potash.
Royal.
Farmers' Favorite.
Schaal-Sheldon Guano.
Grass, Wheat and Oats.
Schaal's Corn and Potato.
Trucker's Manure.
Fine Ground Bone.

THE SCOTT FERTILIZER COMPANY, ELKTON, MD.

Scott's Sure Growth Compound.
Scott's Sure Crop Grower.
Scott's Potato and Truck.
Scott's Victory Brand.
Scott's Potato Grower.
Scott's Sure Growth Superphosphate.
Scott's Ammoniated Base.
Scott's Standard.
Scott's Penna. Potato Grower.
Scott's Special Grain Grower.
Scott's Wheat and Grass Grower.
Scott's Pure Ground Raw Bone.
Scott's Pure Bone Meal.
Scott's Sol. Phos. and Potash. (0-12-2.)
Scott's Tip Top Sol. Phos. 16%.
Scott's Tip Top Sol. Phos. 14%.
Scott's Crop Grower.

Scott's Grain Special.
Scott's Soluble Phosphate and Potash. (0-10-5.)
Nitrate of Soda.
Tankage.

CHARLES H. SEIBERT, MYERSTOWN, PA.

Pigeon Manure Fertilizer, Grade No. 1.
Pigeon Manure Fertilizer, Grade No. 2.

M. L. SHOEMAKER & CO., INC., PHILADELPHIA, PA.

Swift-Sure Super-Phosphate for Potatoes, No. 1.
Swift-Sure Super-Phosphate for General Use.
Swift-Sure Super-Phosphate for Tobacco.
Swift-Sure Super-Phosphate for Potatoes, No. 2.
Swift-Sure Super-Phosphate for Sweet Potatoes.
Swift-Sure Guano for Tomatoes, Truck and Corn.
Swift-Sure for Oats.
Swift-Sure for Spring Trade.
Swift-Sure Good Euough.
Swift-Sure Bone Meal.
Diss. S. C. Rock.

SICKLER FERTILIZER WORKS, PLYMOUTH, PA.

Pure Ground Bone.

THE SMITH AGRICULTURAL CHEMICAL COMPANY, COLUMBIA, OHIO.

Smith's Wheat Maker and Seeding Down.
Smith's Soluble Phosphate and Potash.
Smith's 16% Acid Phosphate.
Smith's Ammoniated Phosphate and Potash.

H. H. SMYSER, YORK, PA.

Chicago Ammoniated Fertilizer.

THE SOUTHERN FERTILIZING CO., BALTIMORE, MD.

High Grade Superphosphate.
Farmers' Mixture.
Ox Brand Phosphate.
Coot Brand.
Mogul Fertilizer.
Ajax Phosphate.
General Crop Grower.
Farmers' Croice.
Royal Crop Grower.

SWIFT & COMPANY, BALTIMORE, MD.

Swift's Three ten naught.
Swift's Diamond "B" Fertilizer.
Swift's Diamond "A" Fertilizer.

Swift's Champion Wheat and Corn Grower.
Swift's Clay Soil Special.
Swift's Special Corn and Wheat Grower.
Swift's New York Corn Special.
Swift's Special Corn Grower.
Swift's Onion, Potato and Tobacco Grower.
Swift's Diamond "C" Fertilizer. (2-8-4)
Swift's Standard Potato Fertilizer.
Swift's Standard Tobacco Fertilizer.
Swift's Red Steer.
Swift's Red Steer Brand.
Swiftt's Super Phosphate.
Swift's Wheat and Rye Grower.
Swift's Ammoniated Phosphate.
Swift's Truck Grower.
Swift's Special Wheat Grower.
Swift's Reliable Grain Fertilizer.
Swift's Wheat Grower and Potash.
Swift's Farmers Home.
Swiftt's High Grade Phosphate and Potash.
Swift's Special Phosphate and Potash.
Swift's High Grade Acid Phosphate Fertilizer.
Swift's Garden City Phosphate Fertilizer.
Swift's Special Top Dresser.
Swift's Top Dresser, Formula No. 2.
Swift's Harrison Formula for Cobblers.
Swift's Special Harrison Formula.
Swift's Long Island Potato Manure.
Swift's Market Garden Manure.
Swift's Truck and Potato Fertilizer.
Swift's White Potato Fertilizer.
Swift's Raw Bone Meal Fertilizer.
Swift's Bone Meal Fertilizer.
Swift's $2\frac{1}{4}$-29 Bone Meal.
Swift's DeGelatinized Bone Fertilizer.
Swift's Hummer.
Swift's Nitrate of Soda.
Swift's High Grade Tankage.
Swift's Diamond "C" Fertilizer. (4-8-4)
Swift's Hay Grower.
Swift's Tankage and Phosphate.
Swift's Florists Special Tankage.
Swift's High Grade Tankage, No. 2.
Swift's Corn and Grain Grower.
Swift's Early Truck Grower.
Swift's Golden Grain Grower.
Swift's Special Grain Fertilizer.
Swift's Diamond "C" Fertilizer. (2-8-5)
Swift's Diamond "K" Fertilizer.
Swift's Truck and Vegetable Fertilizer.
Swift's Schuylkill Valley Favorite.
Swift's Diamond "C" Fertilizer. (1-8-0)
Swift's Special Diamond "A" Fertilizer.
Swift's Ground Tankage.

Swift's Top Dresser.
Swift's No. 1 High Grade Grain Grower.
Swift's High Grade Special.
Swift's Naught Ten Ten.
Swift's New York State Onion Grower.
Swift's Plantation.

TAYLOR PROVISION COMPANY, TRENTON, N. J.

John Taylor's Standard Grain Grower, Revised.

J. M. TEMPLIN, HONEY BROOK, PA.

No. 4. Atlas Brand.
No. 6 Phosphoric Acid Special.

TENNESSEE AGRICULTURAL CHEMICAL CORPORATION, COLUMBIA, TENN.

Tacco Ground Phosphate.

TENNESSEE COAL, IRON AND RAILROAD COMPANY, BIRMINGHAM, ALA.

Duplex Basic Phosphate.

I. P. THOMAS & SON CO., PHILADELPHIA, PA.

Truckers High Grade Guano, 4-8-4.
Tip Top Super Phosphate, 3-8-4.
Victor Potash Fertilizer, 2-8-5.
Champion Guano, 2-10-4.
Farmers' Choice, 2-12-2.
Grain Special.
Normal Fertilizer.
Improved Fertilizer.
Superior Superphosphate.
Special Alkaline Fertilizer.
Alkaline Fertilizer.
Pure Ground Bone.
Raw and Acidulated Bone.
S. C. Phosphate.
16% Acid Phosphate.
Wheat Special.
Thomas Triumph Manure.
Thomas Wheat and Corn Guano.
Long Island Special, 4-8-6.
Nitrate Soda.
Bone Tankage.
Kainit.

TRENTON BONE FERTILIZER COMPANY, TRENTON, N. J.

Pure Ground Bone.
Bone and Tankage.
Corn and Grain.

Sweet Potato and Corn.
4-8-0 Potato.
4-8-5 Potato.

F. W. TUNNELL & COMPANY, INC., PHILADELPHIA, PA.

Wheat Grower.
Grain Manure.
Fish Manure.
Potato and Vegetable Manure.
No. 1 Potato and Truck Manure.
Lightning Guano.
Potash Grain Grower.
Fall Crop Grower.
Wheat and Cereal Manure.
Sweet Potato Manure.
Monmouth's Pride Potato Manure.
10-2 Potash Manure.
10-4 Potash Manure.
Acid Phosphate, 16%.
Pure Ground Bone.

THE J. E. TYGERT COMPANY, SUBSIDIARY OF THE AMERICAN AGRICULTURAL CHEMICAL CO., PHILADELPHIA, PA.

14% Acid Phosphate.
16% Acid Phosphate.
Soluble Phosphate and Potash.
Fearless Fertilizer, Revised.
Pawnee Phosphate.
Ammoniated Fertilizer, A.
Ammoniated Fertilizer, AA.
Ammoniated Fertilizer, AAA.
Great Advancer Phosphate, 1916.
Popular Phosphate.
Prolific Fertilizer.
Golden Harvest Phosphate.
Victor Crop Grower.
Welcome Brand Fertilizer.
Neptune Fish Compound.
Standard Fertilizer.
Success Fertilizer, 1920.
Gold Edge Potato Guano, Revised.
Old Reliable Phosphate, 1920.
Special Potato and Tomato Guano.
Vegetable and Corn Fertilizer.
Early Truck Guano.
Potato Fertilizer.
Special Tobacco Fertilizer.

UNION CHEMICAL WORKS, INC., NORTH WALES, PA.

Ideal Potato Manure.
Grain and Grass Grower.
Farmers Special.

Farmers Favorite.
Three Ten Mixture.
Two Ten Mixture.
Two Eight Mixture.
One Eight Mixture.
Acid Phosphate.
Ground Tankage.
Raw Bone Meal.
General Crop Grower.
High Grade Vegetable Guano.
Nitrate of Soda.

VIRGINIA-CAROLINA CHEMICAL CO. OF DELAWARE, BALTIMORE, MD. AND NEW YORK, N. Y.

V-C Best Potato Formual.
V-C Best Crop Formula.
V-C Best Grain and Grass Formula.
V-C Fish, Bone and Potash.
V-C One, Nine, Three.
V-C Giant Grain and Clover Mixture.
V-C Special Compound.
V-C Champion Manure.
V-C Fish and Bone Mixture.
V-C Special Fish Preparation.
V-C Standard Phosphate and Potash.
V-C 16% Acid Phosphate.
V-C 14% Acid Phosphate.
V-C Plant Food for Vegetables, Lawns and Flowers.
V-C Special Phosphate and Potash.
V-C Star Superphosphate.
V-C Fox Brand.
V-C Universal Brand.
V-C Sweepstakes Brand.
V-C Plymouth Brand.
V-C Monarch Brand.
V-C Plow Brand.
V-C Challenge Brand.
V-C Owl Brand.
V-C National Brand.
V-C Champion Brand.
V-C Double Owl Brand.
V-C Farm Jewel.
V-C B-M Phosphate.

EMIL WAHL MANUFACTURING CO., PHILADELPHIA, PA.

Warranted Pure Philadelphia Button Bone Meal.

J. & R. WALTER, HANOVER, PA.

Walters Crop Grower.

WASHINGTON, ALEXANDER & COOKE COMPANY, CHARLES TOWN,

Wacco Wheat, Corn and Oats Mixture.
Wacco Superphosphate.

Wacco Acid Phosphate.
Wacco Farmers Friend.
Wacco Regular Corn Mixture.
Wacco Economy Corn Grower.
Wacco Double Potash Compound.
Wacco Standard Fish and Potash Mixture.
Wacco Wheat Special.
Wacco Potato and Tobacco Manure.
Wacco Regular Potato and Tobacco Grower.
Wacco Valley Crop Producer.

WITHERBEE, SHERMAN & COMPANY, INC., PORT HENRY, N. Y.

Barium-Phosphate, Grade A.
Barium-Phosphate, Grade B.
Ground Phosphate Rock.

THE ROBERT A. WOOLRIDGE CO. SUBSIDIARY OF THE AMERICAN AGRICULTURAL CHEMICAL CO., BALTIMORE, MD.

Woolridge's Florida Acid Phosphate.
Woolridge's Highgrade Acid Phosphate.
Woolridge's No. 1 Phosphate and Potash.
Woolridge's Soluble Phosphate and Potash.
Woolridge's American Potash Mixture.
Woolridge's Liberty Bell Potash Mixture.
Woolridge's General Crop Grower.
Woolridge's Success Fertilizer.
Woolridge's Old Fidelity Phosphate.
Woolridge's Fish Mixture, No. 1.
Woolridge's Ammoniated Phosphate.
Woolridge's Champion Stag Phosphate.
Woolridge's Chieftain Phosphate.
Woolridge's Triumph Brand Phosphate (Revised.)
Woolridge's Special Potato and Tobacco Fertilizer (Revised.)
Woolridge's Farmers' Favorite Cereal Compound (Revised.)
Woolridge's Basic Lime Phosphate.

THE WORLD'S FERTILIZER PROCESS CO., SHARPSBURG, PA.

Shur-Gro.
Success Plant Grower.

YORK CHEMICAL WORKS, YORK, PA.

Dempwolf's Raw Bone Meal.
Dempwolf's Pure Ground Bone.
Dempwolf's Dissolved Animal Bone.
Dempwolf's Top Dresser.
Dempwolf's Potato and Truck.
Dempwolf's Spring Special.
Dempwolf's General Crop.
Dempwolf's Standard.
Dempwolf's Royal Mixture.

Dempwolf's Grain Special.
Dempwolf's Plow Brand.
Dempwolf's Standard Potash.
Dempwolf's One-Eight-Two.
Dempwolf's One-Eight-One.
Dempwolf's Tobacco Special.
Dempwolf's R. B. Special.
Dempwolf's Prosperity.
Dempwolf's Crop Grower.
Dempwolf's Twelve and Four.
Dempwolf's Twelve and Two.
Dempwolf's Ten and Two.
Dempwolf's Superphosphate.
Dempwolf's Two and Ten.
Dempwolf's Nitrate of Soda.
Dempwolf's Muriate of Potash.
Dempwolf's High Grade Tankage.
Dempwolf's Dried Ground Blood.

LIST OF LIME PRODUCERS AND BRANDS OF THEIR PRODUCTS FOR WHICH LICENSES TO SELL IN PENNSYLVANIA DURING 1920 WERE TAKEN OUT PRIOR TO MARCH 1, 1920.

ALBA MARL LIME CO., CHARLES TOWN, W. VA.

Alba Marl.

THE AMERICAN AGRICULTURAL CHEMICAL CO., NEW YORK CITY, N. Y.

Ground Land Plaster.

AMERICAN LIME AND STONE COMPANY, TYRONE, PA.

No. 1 Agricultural Lime.
No. 2 Agricultural Lime.
Forkings.
Agricultural Ground Limestone.
Hydra-Oxide (H-O) of Lime for Agricultural use.

F. M. BAKER, HUEFNER, PA.

Burned Ground Lime.
Burned Lump Lime.

J. E. BAKER COMPANY, YORK, PA.

Victor Ground Limestone.
Victor Fine Ground Burned Lime.
Victor Burned Lump Lime.
Empire Burned Lump Lime.
Susquehanna Hydrated Lime.

BAUGH & SONS COMPANY, PHILADELPHIA, PA.

Baugh's Pure Ground Land Plaster.

THE BESSEMER LIMESTONE AND CEMENT CO., YOUNGSTOWN, O.

Bessemer Pulverized Limestone.

BLAIR LIMESTONE COMPANY, MARTINSBURG, W. VA.

Opequon Hydrated Lime.
Martinsburg Granulated Lime.
Shenandoah Ground Lime.

BONE DRY LIME CORP., CASSADAGA, N. Y.

Bone Dry Marl.

WALTER T. BRADLEY, PHILADELPHIA, PA.

Lime Screenings.

CALCIUM PRODUCTS COMPANY, HOLLIDAYSBURG, PA.

Calcium Brand Agricultural Lime.

THE CARBON LIMESTONE CO., YOUNGSTOWN, OHIO.

"Carbon" Agricultural Ground Limestone.

CENTRE COUNTY LIME COMPANY, BELLEFONTE, PA.

Pure Hydrated Drilling Lime.
Agricultural Lime in bulk.
Agricultural Ground Limestone.

CHEMICAL LIME COMPANY, BELLEFONTE, PA.

Hydrated Lime.
Agricultural Lime.
Agricultural Ground Limestone.

CLIMAX LIME AND STONE CO., WICK, PA.

Lump Lime.
Ground Lump Lime.
Hydrated Lime.

THE COLUMBIA PRODUCTS COMPANY, CLEVELAND, OHIO

Plant Lime.

F. E. CONLEY STONE CO., UTICA, N. Y.

Raw Ground Lime (Ground Limestone.)

CONNEAUT LAKE MARL CO., HARMONSBURG, PA.

Conneaut Marl Lime.

G. & W. H. CORSON, PLYMOUTH MEETING, PA.

Corson's Prepared Lime (Hydrated).
Run of Kiln.
Fine Lime (Refuse.)

DIETRICK BROS., READING, PA.

Dietrick's Gold Medal Brand Hydrated Lime.
Dietrick's Excelsior Brand Hydrated Lime.

EMIG LIME CO., HELLAM, PA.

Emig Agricultural Lump Lime.

HMIGSVILLE QUARRY CO., EMIGSVILLE, PA.

Lime.

ENTERPRISE LIME AND BALLAST CO., HYNDMAN, PA.

Lump Lime in bulk.
Granulated Lime.

THE FOUNTAIN ROCK LIME CO., WOODSBORO, MD.,

Old Reliable Fountain Rock Hydrated Lime .
Old Reliable Fountain Rock Ground Lime.

THE FRANKLIN MFG. COMPANY, FRANKLIN, PA.

Franklin Brand.

GENERAL PULVERIZED LIMESTONE CO., COLUMBIA, N. J.

Columbia Agricultural Lime.

THE GROVE CITY LIMESTONE COMPANY, GROVE CITY, PA.

Burnt Lump Lime.
Burnt Ground Lime.
Hydrated Lime.
Pulverized Limestone.

THE M. J. GROVE LIME CO., LIME KILN, MD.

Famous Frederick County Agricultural Lime.
Famous Frederick County Ground Lime.
Famous Frederick County Hydrated Lime.
Pulverized Limestone.

J. W. HANKS, FRIEDENS, PA.

I. X. L. R. of K. Agri. Lime.

INDUSTRIAL CHEMICAL COMPANY, NEW YORK CITY, N. Y.

I-C-Co. Precipitated Agricultural Lime (Artificial Carbonate of Lime).
I-C.Co. Precipitated Agricultural Lime (Artificiate Carbonate of Lime, Grade No. 2.)

INDUSTRIAL LIMESTONE COMPANY, BETHLEHEM, PA.

"Bethlehem Brand" Hydrated Lime.

THE LUTHER KELLER CO., SCRANTON, PA.

Keller Lump Agricultural Lime.

HENRY KILGUS, MUNCY, PA.

Muncy Lump Lime.

E. J. LAVINO AND COMPANY, PHILADELPHIA, PA.

"Lavino" Pulverized Limestone.

LEBANON FERTILIZER WORKS, LEBANON, PA.

Levan's Lebanon Valley Hydrated Lime.

LEGORE COMBINATION LIME CO., LEGORE, MD.

Lump Lime Run of Kiln.
Hydrated Lime.

LOW BROTHER & CO., LIME RIDGE, PA.

Standard Grade A Lime.
Standard Grade B Lime.

M. E. McNEAL & SON, WINDBER, PA.

Burnt Lime, Lump & Ground.

MERION LIME AND STONE CO., NORRISTOWN, PA.

Hydrated Lime.
Run-of-Kiln Lime.
Ground Fresh Lime.

MICHIGAN LIMESTONE & CHEMICAL CO., BUFFALO, N. Y.

Calcite Brand Michigan Limestone.

HARVEY MILLER, MUNCY, PENNA.

Hughesville Lump Lime.

NATIONAL MOTAR & SUPPLY CO., PITTSBURGH, PA.

Superior Agricultural Hydrate Lime.
Banner Agricultural Ground Quick Lime.

NATURAL LIME-MARL CO., ROANOKE, VA.

Lime-Marl.

NEW CASTLE LIME & STONE COMPANY, NEW CASTLE, PA.

"New Castle" Agricultural Limestone.

NEW YORK & PENNSYLVANIA COMPANY, JOHNSONBURG, PA.

Nypeu Agricultural Precipitated Lime.

OHIO FARMERS LIME COMPANY, CLEVELAND, OHIO.

Ohio Farmers Lime.

JOHN D. OWENS & SON CO., OWENS, OHIO.

Clover Leaf Brand Agricultural Hydrate Lime.

PALMER LIME & CEMENT CO., NEW YORK CITY, N. Y.

Superfine Chemical Hydrate (Spraying).
Chemical Lump Lime (Spraying).
Challenge Brand Agricultural Lime in bulk.
Challenge Brand Hydrate.
Bethlehem Brand Hydrate.
Ground Limestone.

THE PARAGON PLASTER & SUPPLY CO., BLOOMSBURG, PA.

Paragon Hydrate Lime.
Paragon Hydrate Lime Screenings.

H. D. PATCHEN & P. J. MUZZY & SON, LITTLE MEADOWS, PA.

Little Meadows Pulverized Limestone.

POTOMAC POULTRY FOOD COMPANY, BALTIMORE, MD.

Oyster Shell Dust.

M. E. REEDER, MUNCY, PA.

Freshly Burned Chippewa Lump Lime.

ROBERT A. REICHARD, ALLENTOWN, PA.

Reichard's Lehigh Hydrated Lime.

ROCK-CUT STONE COMPANY, SYRACUSE, N. Y.

Rock-Cut Brand Ground Limestone.

ROSE POINT STONE & LIME COMPANY, NEW CASTLE, PA.

Peerless Hydrated Lime.
Rose Point Hydrated Lime.
Rose Point Ground Burned Lime.
Rose Point Burned Lump Lime.

THE SCIOTO LIME & STONE CO., DELAWARE, OHIO.

Clover Grower Hydrated Lime.

SECURITY CEMENT & LIME COMPANY, HAGERSTOWN, MD.

Berkeley Hydrated Lime.
Berkeley Ground Lime.
Berkeley Pulverized Limestone (Ground).
Berkeley Hydra-Calcite Lime.

SHENANGO LIMESTONE COMPANY, NEW CASTLE, PA.

Shenango Pulverized Raw Limestone.

THE SOLVAY PROCESS COMPANY, SYRACUSE, N. Y.

Solvay Pulverized Limestone.

W. I. SPANGLER, NEWVILLE, PA.

Pulverized Lime.

THE STANDARD LIME & STONE CO., BALTIMORE, MD.

Standard Finely Pulverized Limestone.
Standard Coarse Pulverized Limestone.

STANDARD LIME AND STONE COMPANY, BUCKEYSTOWN, MD.

"Standard Hydrate" Lime in bags.
"Standard Lime" in bulk.
"Ground Lime" in bags.

STEACY & WILTON COMPANY, WRIGHTSVILLE, PA.

Sterling Brand Hydrated Lime.
Pulverized Fresh Burned Lime.
Run of Kiln Agricultural Lime.
Pulverized Limestone.

SWIFT & COMPANY, BALTIMORE, MD.

Swift's Land Plaster.

THOMASVILLE STONE & LIME COMPANY, THOMASVILLE, PA.

Agricultural Lime.
Ground Limestone.

TIDEWATER PORTLAND CEMENT COMPANY, BALTIMORE, MD.

"Tidewater" Hydrated Lime.
"Tidewater" Lump Lime.

F. W. TUNNELL & CO., INC., PHILADELPHA, PA.

Philadelphia Hydrated Lime.

TWINING-LARGE COMPANY, CARPENTERVILLE, N. J.

Agricultural Lime.

VANCE COMPANY, WINFIELD, PA.

Dry Valley, Shoveled.

CHARLES WARNER COMPANY, WILMINGTON, DEL.

Warner's "Limoid."
Pulverized Burned Lime.
Pulverized Limestone.
Run-of-Kiln Lime.

WICKWIRE STEEL COMPANY, BUFFALO, N. Y.

Wickwire Brand.

WINFIELD LIMESTONE COMPANY, PITTSBURGH, PA.

"Winfield" Agricultural Limestone.

YORK CHEMICAL WORKS, YORK, PA.

Pure Ground Land Plaster.